

Case Study – 1

(10 points)

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Submission: Save this Word document with your answers as a PDF file and upload the PDF file to Canvas.

Read the Case Study Overview

Create a list of 10 clarifications you need based on the EVCSS project description

1. How exhaustive of interoperability is expected between the conventional rental billing and the EVCSS? As described, the only requirement is that when a lease terminates, lock access to their charging station(s) and generate a final bill
2. The 4 currently stated required billing options are not mutually exclusive and up to staff, but there is no elaboration on just how much flexibility is should be allowed to staff
 - a. Eg we do know that we must implement a way to charge by time of day, but should the capability exist to **only** bill more at peak hours for a certain type of charging connection, while other charging connections get the same rates all day?
3. The management dashboard must manage tenant accounts, but it is not clarified the scope of these “accounts” – is it just for EV charging matters or for other residential matters?
4. Is the consumer application available for guests to use for on-demand charging?
5. The consumer application must display past and projected bills, but is just the EV bills, or also unit bills?
6. Should the consumer application’s map show other units’ assigned chargers, or on-demand chargers? Should it clarify whether other units or on-demand chargers are being used, even if the tenant themselves can’t use them?
7. The staff dashboard must be able to maintain a waiting list, but it is not clarified what specifically is being waited on. Any spot? A specific spot? Can staff determine that? Can a tenant sacrifice first-come-first-serve to get an optimal spot?
8. The client is expecting large expansion, and yet, is explicitly limiting the scope to 1 parking garage. We should know if this has any chance of changing to allow multiple parking complexes (lots + garages) so we do not have to redesign the fundamentals of components like the map
9. The consumer application must “configure charging billing options to control cost” but there is no clarification on just how flexible this should be. For example, if charging speed or time of day changes rates per kWh, should they be able to throttle or prevent charging until it costs below a specific \$/kwh? Additionally, there is no mention of scheduling charging on the app. Should there not be functionality to stop charging if they’re not at their car?
10. Is the on-demand charging only for guests, or is this service available to anyone who wants to pay? If so, should non-guests be charged more? Would verification be apart of our system, or be done in person by apartment staff?